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This document consists of 2 pages
No. 2 of 7 copies, Series A

2755

S. R. Sapirie, Acting Deputy Manager

July 8, 1948

F. H. Balcher, Chief, Oak Ridge Laboratory Division

WEEKLY ACTIVITY REPORT

REFER TO
SYMBOL: LAB:RGH

RHTG # 84,033²
BOX # 969

1033

Operations

In connection with waste gas disposal at the Laboratory a review was made of the conditions obtaining in the pile exhaust air and the gases coming from the dissolver operations. The only important radioactive constituent in pile exhaust air, when not contaminated with products from a ruptured slug, is A^{41} formed by a neutron-gamma reaction with a natural argon in the air. No good evidence has yet been found of radioactivity due to materials passed through in pile air, such as dust, water spray, etc. No evidence of C^{14} or graphite dust has been noted. The chief noxious gases coming from the dissolver operations are I^{131} (8 day) and X^{133} (5.3 day). Here one-half of the iodine is released from the dissolver and most of this, one-third, is caught in the alkali scrubber. The amount finally released to the stack is considered to be negligible. However, probably 800 to 900 curies escape to the stack during a twenty-four hour dissolving period.

Decisions and arrangements have been made to conduct the field Arum tests. The first test will be the point source, using 10, 50, and 1000 curies of Rala. Measurements will be taken at 3, 6, and 12 feet above the plane of the source. The closest measurement will be at 5 feet, and the most distant at 2,000 feet. The grid determination test will employ approximately 1,000 tantalum sources of about 200 mc each. August 15, is the target date for all results of the test to be in the hands of the Washington group.

During the production of carbon -14, calcium -45 of high specific activity is produced as a by-product. Large quantities of this radioisotope are available, and it is proposed to establish a ceiling price of \$2.20/mc for it.

Construction

Construction by J. A. Jones Construction Company, Inc., was continued on the following projects: 154 KV Transmission Line, Pile Mock-up, Solvent Column Building, Metallurgy Development Facilities, Water

DECLASSIFICATION AUTHORIZED

George J. Jones ORO
NAME (ADD) - ORGANIZATION

4/26/96
DATE

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PLANTS, LABS., BUILDINGS & LAND - D

ChemRisk Document No. 2755

DECLASSIFICATION RECOMMENDED SM

NAME (ADD) AND CLASSIFICATION OFFICER G. Marcwente
Name (ADD) - Organization

4/17/96
Date

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WEEKLY ACTIVITY REPORT

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Main and Reservoir, Bio-chemistry Facilities, Construction Plant, removal of equipment from Building 9210, Y-12 Area, and Water Line Ties.

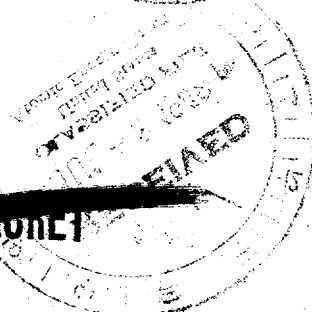
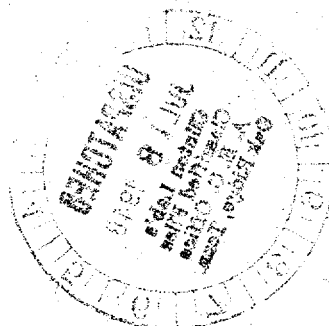
Architect-Engineer work by Patchen and Zimmerman - Engineers, was continued on the Mouse Genetics Facility and the Bio-organic Chemistry Facilities.

Security

Messrs. John K. Gustafson and F. W. McQuiston, Jr., Division of Raw Materials, Washington, and Thomas B. Nolan, Geological Survey, visited the plant on July 2, for a tour of the pile. Mr. Warren Winsche, Military Applications, also visited the Laboratory on July 2.

F. H. Belcher

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